WHAT IS CLAIMED IS:

- 1. A device for positioning a reflective optical probe to a measurement site, the device comprising a attachment mechanism including a slot adapted to receive a positioning member of a reflective optical probe having at least one protruding portion, wherein the attachment mechanism is configured to apply pressure against the optical probe when the attachment mechanism is applied to a measurement site such that at least some of the at least one protruding portion noninvasively recesses into tissue at the measurement site.
- 2. The device of Claim 1, further comprising a pressure applicator for focusing pressure against the optical probe.
- 3. The device of Claim 2, wherein the pressure applicator comprises a biasing member.
 - 4. The device of Claim 3, wherein the biasing member is substantially convex.
- 5. The device of Claim 1, wherein the attachment mechanism comprises a headband.
- 6. The device of Claim 5, further including indicia for instructing a caregiver on a how to apply a predetermined amount of pressure on the optical probe.
 - 7. The device of Claim 6, wherein the indicia include ruler-like indicia.
- 8. The device of Claim 1, wherein the attachment mechanism comprises an adhesive tape.
- 9. The device of Claim 1, wherein the optical probe is selected by a caregiver based at least in part on the measurement site.
- 10. The device of Claim 1, wherein the optical probe includes at least one emitter configured to emit light energy at a wavelength chosen to generate accurate data for legacy oximeter systems.